

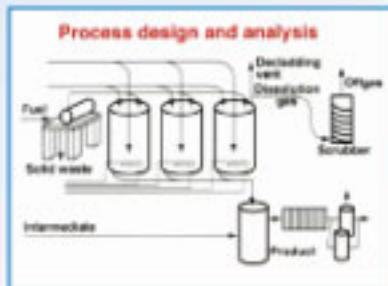
Counterproliferation Analysis

Process and Facility Analysis

We develop and analyze detailed engineering models for the processes that a proliferant country might use to acquire material for nuclear, chemical, or biological weapons or a missile technology program.



Large, industrial-scale facilities are needed to produce, assemble, and store weapons of mass destruction.



Detailed process engineering models are developed to precisely describe the individual processing steps required for the production of materials used in weapons systems.



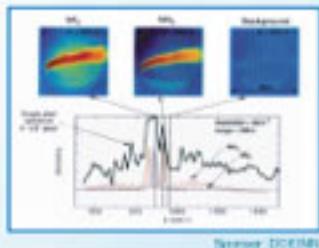
Process and other constraints drive the physical location of equipment within a facility.

Proliferation Signatures Analysis and Sensor Requirements

The information derived from our process and facility modeling is used to evaluate sensor capabilities and to determine detection technology requirements.



Quantitative estimates of the chemical effluents released from weapons production facilities are made and their fate in the environment modeled.

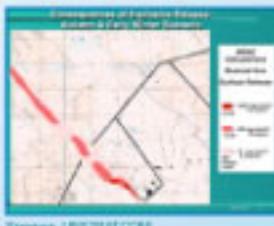


Observable signatures are used to evaluate various sensor technologies for detecting those chemicals in the environment.

Counterproliferation Analysis and Planning System

The Counterproliferation Analysis and Planning System (CAPS) is a tool to aid U.S. policy makers, diplomats, and military planners in understanding foreign weapons programs and assessing the implications of various response options.

We develop and analyze country-specific models of proliferation and identify the critical element which, if interdicted militarily, would cripple a country's weapons production program.



We conduct consequence analyses to determine the effects of military interdiction of proliferant activities on nearby civilian populations and the surrounding environment.

